



BANNER & WITCOFF, LTD.
INTELLECTUAL PROPERTY LAW

**1001 G. STREET N.W., ELEVENTH FLOOR
WASHINGTON, D.C. 20001**

**TEL: 202.824.3000
FAX: 202.824.3001**

www.bannerwitcoff.com

To: John Gillon, Jr.
Company: USPRO
Fax: 1 571 273 0025
Phone: 1 571 272 3282

From: Sarah A. Kagan
Fax: 1 202 824 3751
Phone: 1 202 824 3151

FAX RECEIVED

JUL 26 2006

Re:

COURTESY COPY OF FAX AND RECEIPT SENT TO MAIN NUMBER.

Date Of Transmission: 7/26/2006 1:43:02 PM

Number Of Pages Including This Cover Sheet: 24

Important/Confidential: This message is intended only for the use of the individual or entity to whom it is addressed. This message contains information from the law firm of Banner & Witcoff, Ltd. which may be privileged, confidential or exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, retention, archiving, or copying of the communication is strictly prohibited. If you have received this communication in error, please notify us immediately at our telephone number listed above. We will be happy to arrange for the return of this message to our offices at no cost to you.

CHICAGO

WASHINGTON, D.C.

BOSTON

PORTLAND, OR

USPTO

7/26/2006 1:32 PM

PAGE

1/001

Fax Server

FO:Auto-reply fax to 12028243001 COMPANY:

Auto-Reply Facsimile Transmission



TO:

Fax Sender at 12028243001

Fax Information

Date Received:

7/26/2006 1:25:08 PM [Eastern Daylight Time]

Total Pages:

23 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received
Cover
Page

=====>

12028243001

7/26/2006 1:25:10 PM PAGE 001/023 Fax Server

BANNER & WITCOFF, LTD.
INTELLECTUAL PROPERTY LAW1001 G. STREET N.W., ELEVENTH FLOOR
WASHINGTON, D.C. 20001TEL: 202.824.3400
FAX: 202.824.3401

www.bannewitcoff.com

To: John J. Gillon, Jr.
Company: USPTO
Fax: 1 571 273 8300
Phone: 1 571 272 3282

From: Sarah A. Kagan
Fax: 1 202 824 3751
Phone: 1 202 824 3151

Re:

COPY OR REQUEST TO WITHDRAW WRONGFUL HOLDING OF ABANDONMENT, WITH ATTACHMENTS,
ORIGINALLY FILED 6/16/2003

Date Of Transmission: 7/26/2006 1:11:10 PM
Number Of Pages Including This Cover Sheet: 23

Important Notice: This message is intended only for the individual or entity to whom it is addressed. This message contains information from the law firm of Banner & Witcoff, Ltd. which may be privileged, confidential or exempt from disclosure under applicable law. If the reader of this message is not an intended recipient, you are hereby notified that any dissemination, distribution, copying, reviewing, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately via telephone or e-mail. We will be happy to arrange for the return of any messages or our deletion of the same to you.

CHICAGO WASHINGTON, D.C. BOSTON PORTLAND, OR
PAGE 001 REV 04/01/03 B&W 10/01/03

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE****In re the Application of:****Shibin ZHOU *et al.*****Serial No.: 09/776,696****Filed: February 6, 2001****For: HUMAN FAST-1 GENE****Atty. Docket No.: 001107.00087****Group Art Unit: 1636****Examiner: TBA****Confirmation No.: 5642****REQUEST TO WITHDRAW HOLDING OF ABANDONMENT*****VIA FACSIMILE*****703-308-7751 (OIPE)****703-308-6916 (Nancy Johnson, Petitions Attorney)****Commissioner of Patents****P.O. Box 1450****Alexandria, VA 22313-1450****Sir:**

In response to the Notice of Abandonment mailed July 7, 2003, Applicants respectfully request that the Commissioner withdraw the holding of abandonment because the application should not have been held abandoned. The Notice of Abandonment indicates that the basic filing fee and surcharge were not paid. Applicants, however, submitted authorizations for payment of these fees with their timely reply to the Notice to File Missing Parts. The fees were authorized in two places: (1) on page 1 of the Response; and (2) in the fee transmittal. A copy of the Response to Notice of Missing Parts including fee transmittal authorizing payment of filing fees, sequence listing, amendment with respect to sequence listing, figures, and date stamped receipt postcard is attached.

1 of 2

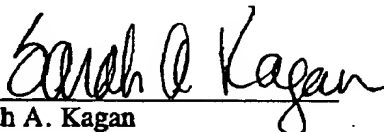
Request to Withdraw Holding of Abandonment
U.S. Patent Application No. 09/776,696

PATENT

It is believed that no fee is required with this paper, however, the Office may consider this a Petition to Revive and may charge any required fee to Deposit Account 19-0733. If there are any questions, please feel free to contact the undersigned at 202-824-3000.

Respectfully submitted,

Dated: August 19, 2003

By: 
Sarah A. Kagan
Registration No. 32,141

Banner & Witcoff, Ltd.
Customer No. 22907



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 09/776,696 | 02/06/2001 | Shibin Zhou | 01107.00087 |

22907
BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

CONFIRMATION NO. 5642
ABANDONMENT/TERMINATION
LETTER

OC000000010437283

Date Mailed: 07/07/2003

NOTICE OF ABANDONMENT UNDER 37 CFR 1.53 (f) OR (g)

The above-identified application is abandoned for failure to timely or properly reply to the Notice to File Missing Parts (Notice) mailed on 09/05/2001.

- The reply received on 10/16/2001 was improper. The reply did not include:
 - The surcharge under 37 CFR 1.16(l) required for filing the basic filing fee or cover sheet on a date later than the filing date of a provisional application.
 - The full amount of the basic filing fee under 37 CFR 1.16(a), (f), (g), or (k). *Note: A nonprovisional application may not be relied on for benefits under 35 U.S.C. 120 and 37 CFR 1.78 unless the processing and retention fee set forth in 37 CFR 1.21(f) is paid within the one year period set forth in 37 CFR 1.53(f). A provisional application may not be relied on for benefits under 35 U.S.C. 119(e) and 37 CFR 1.78 unless the basic filing fee is paid.*

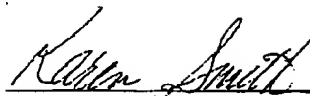
A petition to the Commissioner under 37 CFR 1.137 may be filed requesting that the application be revived.

Under 37 CFR 1.137(a), a petition requesting the application be revived on the grounds of **UNAVOIDABLE DELAY** must be filed promptly after the applicant becomes aware of the abandonment and such petition must be accompanied by: (1) an adequate showing of the cause of unavoidable delay; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(l); and (4) a terminal disclaimer if required by 37 CFR 1.137(d).

Under 37 CFR 1.137(b), a petition requesting the application be revived on the grounds of **UNINTENTIONAL DELAY** must be filed promptly after applicant becomes aware of the abandonment and such petition must be accompanied by: (1) a statement that the entire delay was unintentional; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(m); and (4) a terminal disclaimer if required by 37 CFR 1.137(d).

Any questions concerning petitions to revive should be directed to "Office of Petitions" at (703) 305-9282.

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 3 - OFFICE COPY

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

| | | |
|-------------------------|---|------------------------|
| In re Application Of: |) | Group Art Unit: 1636 |
| |) | |
| Shibin ZHOU |) | BOX: MISSING PARTS |
| |) | |
| Serial No.: 09/776,696 |) | |
| |) | Docket No. 01107.00087 |
| Filed: February 6, 2001 |) | |
| |) | |
| For: HUMAN FAST-1 GENE |) | |

**RESPONSE TO NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL
APPLICATION UNDER 37 C.F.R. § 1.53(b)**

Assistant Commissioner of Patents
Washington, D.C. 20231
Attn: Box Missing Parts

Dear Sir:

In response to the Notice to File Missing Parts Of Non-provisional Application, dated September 5, 2001, the Applicant is hereby submitting a Request to Use Computer Readable Form and corrected drawings.

The Commissioner is authorized to charge \$750.00 to Deposit Account No. 19-0733, to cover the following:

\$370.00 - Basic Filing Fee;

\$ 63.00 - 7 total claims over 20;

\$252.00 - 6 independent claims over 3;

\$ 65.00 - Surcharge for late declaration.

U.S. Application No. 09/776,696

Attorney Docket No. 001107.00087

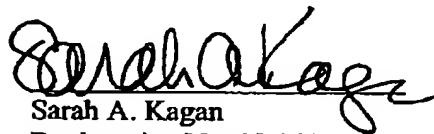
Page 2

It is believed that these fees as calculated are correct. However, if an additional fee is required, please charge Deposit Account No. 19-0733.

Respectfully submitted,

October 16, 2001

By:


Sarah A. Kagan
Registration No. 32,141

Banner & Witcoff, LTD.
Eleventh Floor
1001 G Street, N.W.
Washington, D.C. 2001
(202) 508-9100

423624-1



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|------------------------|
| 09/776,696 | 02/06/2001 | Shibin Zhou | 01107.00087 |

22907
BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

CONFIRMATION NO. 5642

FORMALITIES LETTER



OC00000006513112

Date Mailed: 09/05/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
Applicant must submit \$ 355 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).
- Total additional claim fee(s) for this application is \$303.
 - \$63 for 7 total claims over 20.
 - \$240 for 6 independent claims over 3.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$ 723.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);
- The paper or compact disc copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e). Applicant must provide a substitute paper or compact disc copy of the "Sequence Listing", as well as an amendment directing its entry into the

application OR a substitute computer readable form (CRF) copy of the "Sequence Listing". These two items must be the same. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

Under the Paperwork Reduction Act of 1995

persons are required to respond to a collection of information

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
It displays a valid OMB control number.**FEE TRANSMITTAL**
for FY 2002

Patent fees are subject to annual revision.

Complete if Known

| | |
|----------------------|------------------|
| Application Number | 09/776,696 |
| Filing Date | February 6, 2001 |
| First Named Inventor | Shibin ZHOU |
| Examiner Name | TBA |
| Group / Art Unit | 1636 |
| Attorney Docket No. | 001107.00087 |

TOTAL AMOUNT OF PAYMENT (\$) 750.00

METHOD OF PAYMENT (check one)

1. ☒

The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

Deposit
Account
Number

19-0733

Deposit
Account
Name

Banner & Witcoff

- ☒ Charge Any Additional Fee Required
Under 37 CFR 1.16 and 1.17
- ☒ Applicant claims small entity status.
See 37 CFR 1.27

2. ☐

Payment Enclosed:

☐ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1.

BASIC FILING FEE

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description | Fee Paid |
|----------------------|-----------------------|----------------------|-----------------------|------------------------|----------|
| 101 | 740 | 201 | 370 | Utility filing fee | 370.00 |
| 106 | 330 | 208 | 165 | Design filing fee | |
| 107 | 510 | 207 | 255 | Plant filing fee | |
| 108 | 740 | 208 | 370 | Reissue filing fee | |
| 114 | 160 | 214 | 80 | Provisional filing fee | |

SUBTOTAL (1)

(\$ 370.00)

2.

EXTRA CLAIM FEES

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------|-----------------|-------------------|-------------|
| 27 | -20 ** | 7 | 9 |
| 9 | -3 ** | 8 | 42 |
| | | | 0 |

| Large Fee Code | Entity Fee (\$) | Small Fee Code | Entity Fee (\$) | Fee Description |
|----------------------|-----------------------|----------------------|-----------------------|--|
| 103 | 18 | 203 | 9 | Claims in excess of 20 |
| 102 | 84 | 202 | 42 | Independent claims in excess of 3 |
| 104 | 280 | 204 | 140 | Multiple dependent claim, if not paid |
| 109 | 84 | 209 | 42 | ** Reissue independent claims over original patent |
| 110 | 18 | 210 | 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2)

(\$ 315.00)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

| Large Entity Fee Code | Large Entity Fee (\$) | Small Entity Fee Code | Small Entity Fee (\$) | Fee Description | Fee Paid |
|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--|----------|
| 105 | 130 | 205 | 65 | Surcharge - late filing fee or oath | 65.00 |
| 127 | 50 | 227 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 139 | 130 | 139 | 130 | Non-English specification | |
| 147 | 2,520 | 147 | 2,520 | For filing a request for reexamination | |
| 112 | 920* | 112 | 920* | Requesting publication of SIR prior to Examiner action | |
| 113 | 1,840* | 113 | 1,840* | Requesting publication of SIR after Examiner action | |
| 115 | 110 | 215 | 55 | Extension for reply within first month | |
| 116 | 400 | 216 | 200 | Extension for reply within second month | |
| 117 | 820 | 217 | 480 | Extension for reply within third month | |
| 118 | 1,440 | 218 | 720 | Extension for reply within fourth month | |
| 128 | 1,960 | 228 | 980 | Extension for reply within fifth month | |
| 119 | 320 | 219 | 160 | Notice of Appeal | |
| 120 | 320 | 220 | 160 | Filing a brief in support of an appeal | |
| 121 | 280 | 221 | 140 | Request for oral hearing | |
| 138 | 1,510 | 138 | 1,510 | Petition to institute a public use proceeding | |
| 140 | 110 | 240 | 55 | Petition to revive - unavoidable | |
| 141 | 1,280 | 241 | 640 | Petition to revive - unintentional | |
| 142 | 1,280 | 242 | 640 | Utility issue fee (or reissue) | |
| 143 | 460 | 243 | 230 | Design issue fee | |
| 144 | 820 | 244 | 310 | Plant issue fee | |
| 122 | 130 | 122 | 130 | Petitions to the Commissioner | |
| 123 | 50 | 123 | 50 | Processing fee under 37 CFR 1.17 (q) | |
| 126 | 180 | 126 | 180 | Submission of Information Disclosure Sheet | |
| 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) | |
| 146 | 740 | 246 | 370 | Filing a submission after final rejection (37 CFR § 1.128(a)) | |
| 149 | 740 | 249 | 370 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 179 | 740 | 279 | 370 | Request for Continued Examination (RCE) | |
| 169 | 900 | 169 | 900 | Request for expedited examination of a design application | |

Other fee (specify) _____

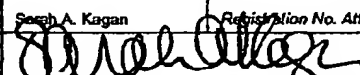
*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$ 65.00)

SUBMITTED BY

Complete if applicable

| | | | | | |
|-------------------|---|---------------------------------|--------|-----------|------------------|
| Name (Print/Type) | Seesh A. Kagan | Registration No. Attorney/Agent | 32,141 | Telephone | 202-508-9100 |
| Signature |  | | | Date | October 16, 2001 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Shibin ZHOU

Serial No. 09/776,696

Filed: February 6, 2001

For: HUMAN FAST-1 GENE

Group Art Unit: 1636

Examiner: TBA

Attorney Docket No. 01107.00087

**AMENDMENT AND RESPONSE TO NOTICE TO
COMPLY WITH SEQUENCE LISTING RULES**Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

When filing the subject application on 6 February 2001, Applicants submitted a substitute sequence listing in paper form and asked that the computer readable form of the parent application be used for examination. A copy of these papers are attached.

IN THE SPECIFICATION:

Delete pages 29-41 and add the new sequence listing to the end of the application. Renumber pages 42-48 as pages 29-35.

STATEMENT:

The new sequence listing adds no new matter.

Respectfully submitted,

Date: October 16, 2001

By:



Sarah A. Kagan

Registration No. 32,141

BANNER & WITCOFF, LTD.
1001 G Street, N.W., Eleventh Floor
Washington, D.C. 20001-4597
(202) 508-9100

423541-1

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

Shibin Zhou *et al.*

Serial No. Unassigned

Filed: February 7, 2001

For: HUMAN FAST-1 GENE

)

)

)

)

)

)

)

Prior Group Art Unit: 1636

Prior Examiner: T. McKelvey

Atty. Dkt. No. 01107.00087

SEQUENCE RULES COMPLIANCE

Assistant Commissioner of Patents & Trademarks
Washington, D.C. 20231


Dear Sir:

A paper copy of a substitute sequence listing submitted in parent application U.S. Serial No. 09/113,, 309 is submitted herewith. Please use the computer readable form submitted in the parent application on 18 November 1999 for examination of the subject application.

The content of the two forms, paper and CRF, are believed to be identical.

Respectfully submitted,

02-06-01
Date


Sarah A. Kagan
Reg. No. 32,141

BANNER & WITCOFF, LTD.
1001 G Street, N.W. - Eleventh Floor
Washington, D.C. 20001-4597
Telephone: 202/508-9100

COPY

SEQUENCE LISTING

<110> Zhou, Shibin
Zawel, Leigh
Vogelstein, Bert
Kinzler, Kenneth

<120> Human Fast-1 Gene

<130> 01107.10898

<140> 09/113,309

<141> 1998-07-10

<160> 19

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 1793

<212> DNA

<213> Homo sapiens

<400> 1

| | | | | | | | | | | |
|------------|-----|------------|-----------|-----------|-----|------------|----|-----------|-----|------|
| gttgagtc | aa | tgtgtcccc | tcttgttct | aggggtcg | ggg | cttcattgg | cc | ttctcctcc | aa | 60 |
| ggaagctc | ca | cctgatcat | g | tcctgggtg | g | atatccagc | cc | cccatagtt | c | 120 |
| agcagctg | ct | agatcttg | aa | ctccaggag | c | gccccacgc | cc | ttgggagct | t | 180 |
| aaatactc | cc | ccatttgta | a | aatgggggt | cc | tgaaacctg | a | ccagggaga | a | 240 |
| tagccatg | gg | tcacgcagc | c | ccctttga | ag | ccgggcttg | g | ccaccaaa | g | 300 |
| gggtggag | act | gaggcctc | ag | gagaagccc | c | actagaatg | ct | ctctctg | ccc | 360 |
| gattaacca | aa | aacctgcta | a | ttgtgga | ag | cctcggcat | g | ctccccctc | cc | 420 |
| ttcctccct | tt | ccctccctc | cc | cccttccat | c | ccgaatgata | a | aaggcccc | ag | 480 |
| ccagcccg | gc | ctcaggtcc | c | ggccctgct | t | tctacactg | c | cccaccg | ccc | 540 |
| acccgccag | c | gccctgccc | a | acgtgtcta | c | cgctcccgca | t | tggggccc | tg | 600 |
| cgccctggg | gc | ccccagagg | c | agagtcg | ccc | tcccagccc | c | ctaagagg | ag | 660 |
| tacctgcg | ac | atgacaagg | c | ccccacacc | t | acttggcca | t | gatcgctt | g | 720 |
| gcccctcc | ct | ccgcagact | g | gaagctgg | c | cagatcatc | c | gtcaggtc | ca | 780 |
| cccttcttc | ta | gggaagacta | c | cgagggctg | g | aaagactcca | t | tcgccaca | aa | 840 |
| aaccgatgc | t | tccgcaagg | t | gcccgaagg | ac | cctqcaaa | g | cccaggcca | aa | 900 |
| tgggcggct | cg | acgtgagct | g | gatcccag | ct | gagggcctc | c | ggctgcaga | aa | 960 |
| tgccggcg | ct | ggcagaacg | g | aggtgcg | ct | ggagccttc | g | ccaaggacc | t | 1020 |
| gtgctgcag | c | ggcggccata | c | ccggccg | ccc | agtccccc | gc | caccaccag | t | 1080 |
| agcatcaag | t | ccctgctagg | g | aggggtccg | gg | gagggggc | ac | cctggccgg | g | 1140 |
| cagagcag | cc | cagttcctg | c | aggcacagg | g | aacagtggg | g | aggaggcgg | t | 1200 |
| ccccctcc | ct | cttctgag | ag | gcctctgt | g | ccccctgt | c | cccttcc | tg | 1260 |
| gtggagggg | g | agactgtgc | a | ggggggag | cc | atcgggccc | t | caaccctc | t | 1320 |
| agggcctgg | c | ctctccact | t | actgcagg | gc | accgcagtt | c | ctgggggac | g | 1380 |
| ggacacagg | g | cctccctct | g | ggggcagct | g | cccacctct | c | acttgccat | t | 1440 |
| aatgtggt | aa | tgcccttgg | c | accaccacc | c | acctcctgt | c | cccagtg | tc | 1500 |
| cctgcctact | g | gggggggtg | gc | ccctgaa | acc | cgagggccc | c | cagggctg | ct | 1560 |
| gacgcctct | t | tccaagggg | t | gccaccaca | c | aaaagcat | ct | acgacgtt | tg | 1620 |
| cctcgggacc | g | tgccggccc | c | tgcccagg | c | tggtgtct | ct | cctggtgc | ag | 1680 |
| tcttaagaca | g | ggggcgctc | ct | ccccctcc | g | ctccccccc | c | cacctgtt | tg | 1740 |
| agggaggcgg | g | ctgtctgcg | a | cacagcag | ct | cgaaaacc | ag | gcagagct | tg | 1793 |

<210> 2

<211> 365

<212> PRT

<213> Homo sapiens

<400> 2

```

Met Gly Pro Cys Ser Gly Ser Arg Leu Gly Pro Pro Glu Ala Glu Ser
 1           5           10           15
Pro Ser Gln Pro Pro Lys Arg Arg Lys Lys Arg Tyr Leu Arg His Asp
          20           25           30
Lys Pro Pro Tyr Thr Tyr Leu Ala Met Ile Ala Leu Val Ile Gln Ala
          35           40           45
Ala Pro Ser Arg Arg Leu Lys Leu Ala Gln Ile Ile Arg Gln Val Gln
          50           55           60
Ala Val Phe Pro Phe Phe Arg Glu Asp Tyr Glu Gly Trp Lys Asp Ser
65          70          75          80
Ile Arg His Asn Leu Ser Ser Asn Arg Cys Phe Arg Lys Val Pro Lys
          85          90          95
Asp Pro Ala Lys Pro Gln Ala Lys Gly Asn Phe Trp Ala Val Asp Val
          100          105          110
Ser Leu Ile Pro Ala Glu Ala Leu Arg Leu Gln Asn Thr Ala Leu Cys
          115          120          125
Arg Arg Trp Gln Asn Gly Gly Ala Arg Gly Ala Phe Ala Lys Asp Leu
          130          135          140
Gly Pro Tyr Val Leu His Gly Arg Pro Tyr Arg Pro Pro Ser Pro Pro
          145          150          155          160
Pro Pro Pro Ser Glu Gly Phe Ser Ile Lys Ser Leu Leu Gly Gly Ser
          165          170          175
Gly Glu Gly Ala Pro Trp Pro Gly Leu Ala Pro Gln Ser Ser Pro Val
          180          185          190
Pro Ala Gly Thr Gly Asn Ser Gly Glu Glu Ala Val Pro Thr Pro Pro
          195          200          205
Leu Pro Ser Ser Glu Arg Pro Leu Trp Pro Leu Cys Pro Leu Pro Gly
          210          215          220
Pro Thr Arg Val Glu Gly Glu Thr Val Gln Gly Gly Ala Ile Gly Pro
          225          230          235          240
Ser Thr Leu Ser Pro Glu Pro Arg Ala Trp Pro Leu His Leu Leu Gln
          245          250          255
Gly Thr Ala Val Pro Gly Gly Arg Ser Ser Gly Gly His Arg Ala Ser
          260          265          270
Leu Trp Gly Gln Leu Pro Thr Ser Tyr Leu Pro Ile Tyr Thr Pro Asn
          275          280          285
Val Val Met Pro Leu Ala Pro Pro Pro Thr Ser Cys Pro Gln Cys Pro
          290          295          300
Ser Thr Ser Pro Ala Tyr Trp Gly Val Ala Pro Glu Thr Arg Gly Pro
          305          310          315          320
Pro Gly Leu Leu Cys Asp Leu Asp Ala Leu Phe Gln Gly Val Pro Pro
          325          330          335
Asn Lys Ser Ile Tyr Asp Val Trp Val Ser His Pro Arg Asp Leu Ala
          340          345          350
Ala Pro Gly Pro Gly Trp Leu Leu Ser Trp Cys Ser Leu
          355          360          365

```

<210> 3

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3

```

Val Ala Met Ile Asn Ala Cys Ile Asp Ser Met Ser Ser Ile Leu Pro
 1           5           10           15

```

Phe Thr Pro Pro Val Val Lys Arg Leu Leu Gly Trp Lys Lys Ser Ala
20 25 30
Gly Gly Ser Gly Gly Ala Gly Gly Glu Gln Asn Gly Gln Glu Glu
35 40 45
Lys Trp Cys Glu Lys Ala Val Lys Ser Leu Val Lys Lys Leu Lys Lys
50 55 60
Thr Gly Arg Leu Asp Glu Leu Glu Lys Ala Ile Thr Thr Gln Asn Cys
65 70 75 80
Asn Thr Lys Cys Val Thr Ile Pro Ser Thr Cys Ser Glu Ile Trp Gly
85 90 95
Leu Ser Thr Pro Asn Thr Ile Asp Gln Trp Asp Thr Thr Gly Leu Tyr
100 105 110
Ser Phe Ser Glu Gln Thr Arg Ser Leu Asp Gly Arg Leu Gln Val Ser
115 120 125
His Arg Lys Gly Leu Pro His Val Ile Tyr Cys Arg Leu Trp Arg Trp
130 135 140
Pro Asp Leu His Ser His His Glu Leu Lys Ala Ile Glu Asn Cys Glu
145 150 155 160
Tyr Ala Phe Asn Leu Lys Lys Asp Glu Val Cys Val Asn Pro Tyr His
165 170 175
Tyr Gln Arg Val Glu Thr Pro Val Leu Pro Pro Val Leu Val Pro Arg
180 185 190
His Thr Glu Ile Leu Thr Glu Leu Pro Pro Leu Asp Asp Tyr Thr His
195 200 205
Ser Ile Pro Glu Asn Thr Asn Phe Pro Ala Gly Ile Glu Pro Gln Ser
210 215 220
Asn Tyr Ile Pro Glu Thr Pro Pro Pro Gly Tyr Ile Ser Glu Asp Gly
225 230 235 240
Glu Thr Ser Asp Gln Gln Leu Asn Gln Ser Met Asp Thr Gly Ser Pro
245 250 255
Ala Glu Leu Ser Pro Thr Thr Leu Ser Pro Val Asn His Ser Leu Asp
260 265 270
Leu Gln Pro Val Thr Tyr Ser Glu Pro Ala Phe Trp Cys Ser Ile Ala
275 280 285
Tyr Tyr Glu Leu Asn Gln Arg Val Gly Glu Thr Phe His Ala Ser Gln
290 295 300
Pro Ser Leu Thr Val Asp Gly Phe Thr Asp Pro Ser Asn Ser Glu Arg
305 310 315 320
Phe Cys Leu Gly Leu Leu Ser Asn Val Asn Arg Asn Ala Thr Val Glu
325 330 335
Met Thr Arg Arg His Ile Gly Arg Gly Val Arg Leu Tyr Tyr Ile Gly
340 345 350
Gly Glu Val Phe Ala Glu Cys Leu Ser Asp Ser Ala Ile Phe Val Gln
355 360 365
Ser Pro Asn Cys Asn Gln Arg Tyr Gly Trp His Pro Ala Thr Val Cys
370 375 380
Lys Ile Pro Pro Gly Cys Asn Leu Lys Ile Phe Asn Asn Gln Glu Phe
385 390 395 400
Ala Ala Leu Leu Ala Gln Ser Val Asn Gln Gly Phe Glu Ala Val Tyr
405 410 415
Gln Leu Thr Arg Met Cys Thr Ile Arg Met Ser Phe Val Lys Gly Trp
420 425 430
Gly Ala Glu Tyr Arg Arg Gln Thr Val Thr Ser Thr Pro Cys Trp Ile
435 440 445
Glu Leu His Leu Asn Gly Pro Leu Gln Trp Leu Asp Lys Val Leu Thr
450 455 460
Gln Met Gly Ser Pro Ser Val Arg Cys Ser Ser Met Ser
465 470 475

<210> 4
<211> 8
<212> DNA
<213> Homo sapiens

<400> 4
tgtkkatt 8

<210> 5
<211> 18
<212> DNA
<213> Homo sapiens

<400> 5
ctggaaagac tccattcg 18

<210> 6
<211> 19
<212> DNA
<213> Homo sapiens

<400> 6
cacagagccc tctcagaag 19

<210> 7
<211> 18
<212> DNA
<213> Homo sapiens

<400> 7
cccccttcca tccgaatg 18

<210> 8
<211> 19
<212> DNA
<213> Homo sapiens

<400> 8
gagctgctgt gtcgcagac 19

<210> 9
<211> 79
<212> DNA
<213> Artificial Sequence

<220>
<223> flag primer

<400> 9
ggatcctaatacgaactact ataggagac caccatggac tacaaggacg acgatgacaa 60
ggggccctgc agcggtcc 79

<210> 10
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> flag primer

<400> 10
ggatcctaatacgaactact atagggagac caccatggac tacaaggacg acgatgacaa 60
gccccttcct ggcacacga g 81

<210> 11
<211> 31
<212> DNA
<213> Homo sapiens

<400> 11
tatgcggccg ccaccatggg gccctgcagc g 31

<210> 12
<211> 30
<212> DNA
<213> Homo sapiens

<400> 12
tatgcggccg cgagctgctg tgtegcagac 30

<210> 13
<211> 7
<212> DNA
<213> Homo sapiens

<400> 13
rymaaya 7

<210> 14
<211> 22
<212> DNA
<213> Homo sapiens

<400> 14
tagtaaacac tctatcaatt gg 22

<210> 15
<211> 20
<212> DNA
<213> Homo sapiens

<400> 15
gtccagtatc gtttacagcc 20

<210> 16
<211> 21
<212> DNA
<213> Homo sapiens

<400> 16
cggattgtgt attggctgta c 21

<210> 17
<211> 21
<212> DNA
<213> Homo sapiens

<400> 17
cggattctgt atcggctgta c 21

<210> 18
 <211> 55
 <212> DNA
 <213> Homo sapiens

<400> 18
 tatctgctgc cctaaatgt gtattccatg gaaatgtctg cctttctctc cgtac

55

<210> 19
 <211> 518
 <212> PRT
 <213> Xenopus laevis

<400> 19
 Met Arg Asp Pro Ser Ser Leu Tyr Ser Gly Phe Pro Ala Gly Ser Gln
 1 5 10 15
 Tyr Glu Ser Val Glu Pro Pro Ser Leu Ala Leu Leu Ser Ser Ile Asp
 20 25 30
 Gln Glu Gln Leu Pro Val Ala Thr Gly Gln Ser Tyr Asn His Ser Val
 35 40 45
 Gln Pro Trp Pro Gln Pro Trp Pro Pro Leu Ser Leu Tyr Arg Glu Gly
 50 55 60
 Gly Thr Trp Ser Pro Asp Arg Gly Ser Met Tyr Gly Leu Ser Pro Gly
 65 70 75 80
 Thr His Glu Gly Ser Cys Thr His Thr His Glu Gly Pro Lys Asp Ser
 85 90 95
 Met Ala Gly Asp His Thr Arg Ser Arg Lys Ser Lys Lys Lys Asn Tyr
 100 105 110
 His Arg Tyr Tyr Lys Pro Pro Tyr Ser Tyr Leu Ala Met Ile Ala Leu
 115 120 125
 Val Ile Gln Asn Ser Pro Glu Lys Arg Leu Lys Leu Ser Gln Ile Leu
 130 135 140
 Lys Glu Val Ser Thr Leu Phe Pro Phe Phe Asn Gly Asp Tyr Met Gly
 145 150 155 160
 Trp Lys Asp Ser Ile Arg His Asn Leu Ser Ser Ser Asp Cys Phe Lys
 165 170 175
 Lys Ile Leu Lys Asp Pro Gly Lys Pro Gln Ala Lys Gly Asn Phe Trp
 180 185 190
 Thr Val Asp Val Ser Arg Ile Pro Leu Asp Ala Met Lys Leu Gln Asn
 195 200 205
 Thr Ala Leu Thr Arg Gly Gly Ser Asp Tyr Phe Val Gln Asp Leu Ala
 210 215 220
 Pro Tyr Ile Leu His Asn Tyr Lys Tyr Glu His Asn Ala Gly Ala Tyr
 225 230 235 240
 Gly His Gln Met Pro Pro Ser His Ala Arg Ser Leu Ser Leu Ala Glu
 245 250 255
 Asp Ser Gln Gln Thr Asn Thr Gly Gly Lys Leu Asn Thr Ser Phe Met
 260 265 270
 Ile Asp Ser Leu Leu His Asp Leu Gln Glu Val Asp Leu Pro Asp Ala
 275 280 285
 Ser Arg Asn Leu Glu Asn Gln Arg Ile Ser Pro Ala Val Ala Met Asn
 290 295 300
 Asn Met Trp Ser Ser Ala Pro Leu Leu Tyr Thr His Ser Lys Pro Thr
 305 310 315 320
 Arg Asn Ala Arg Ser Pro Gly Leu Ser Thr Ile His Ser Thr Tyr Ser
 325 330 335
 Ser Ser Ser Ser Ser Ile Ser Thr Ile Ser Pro Val Gly Phe Gln Lys
 340 345 350
 Glu Gln Glu Lys Ser Gly Arg Gln Thr Gln Arg Val Gly His Pro Ile

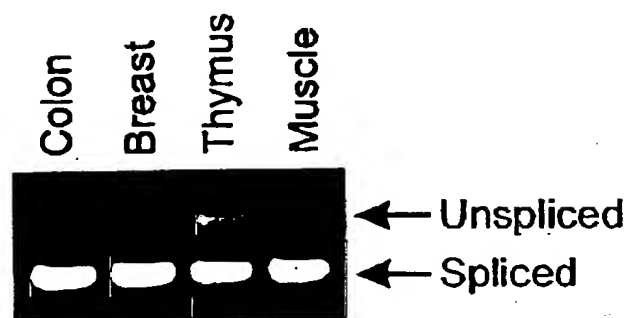
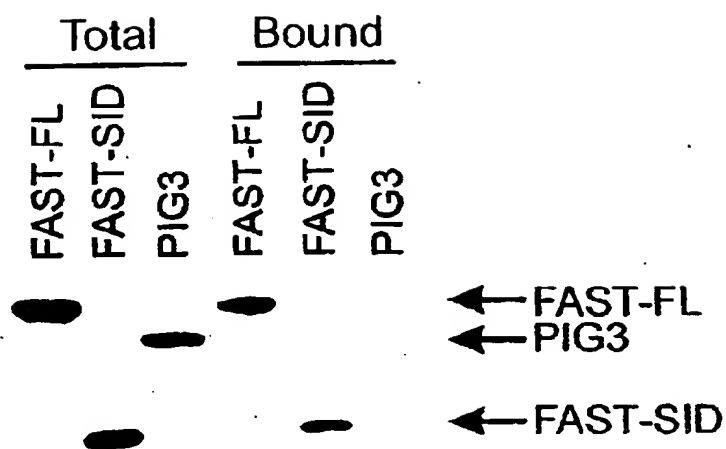
355 360 365
Lys Arg Ser Arg Glu Asp Asp Asp Cys Ser Thr Thr Ser Ser Asp Pro
370 375 380
Asp Thr Gly Asn Tyr Ser Pro Ile Glu Pro Pro Lys Lys Met Pro Leu
385 390 395 400
Leu Ser Leu Asp Leu Pro Thr Ser Tyr Thr Lys Ser Val Ala Pro Asn
405 410 415
Val Val Ala Pro Pro Ser Val Leu Pro Phe Phe His Phe Pro Arg Phe
420 425 430
Thr Tyr Tyr Asn Tyr Gly Pro Ser Pro Tyr Met Thr Pro Pro Tyr Trp
435 440 445
Gly Phe Pro His Pro Thr Asn Ser Gly Gly Asp Ser Pro Arg Gly Pro
450 455 460
Gln Ser Pro Leu Asp Leu Asp Asn Met Leu Arg Ala Met Pro Pro Asn
465 470 475 480
Lys Ser Val Phe Asp Val Leu Thr Ser His Pro Gly Asp Leu Val His
485 490 495
Pro Ser Phe Leu Ser Gln Cys Leu Gly Ser Ser Gly Ser Pro Tyr Pro
500 505 510
Ser Arg Gln Gly Leu Met
515

U.S. Serial No.: 09/776,696 Atty. Dkt. No.: 001107.00087
 Inventor: Shubin ZHOU
 Title: HUMAN FAST-1 GENE

FIG. 1

| | | |
|---------|---|-----|
| hFAST-1 | npccsgrlqpdeaespsqp----- | 21 |
| xFAST-1 | nrpsslysqfpagsqyesveppslalssidqeqlpvtgqsynhsvqpw | 51 |
| hFAST-1 | ----- | 21 |
| xFAST-1 | pqpwpplsllyreggtwspdrgrsmgylspgthegscsthhegpkdsmagdht | 102 |
| hFAST-1 | ---KRRKKRILRHDKPPYITLALVALVIAAPSRRLKLAQITIRQVQAVEPP | 69 |
| xFAST-1 | rsrKSKKKNYHNYKPPYSYLAVALVIONSPKRLKLSQILKEVSTLEPP | 153 |
| hFAST-1 | FREDYEGWKOSTIRHNLSSNRCFRKVPKPAKPDAKGFHAWDVSLTPAEAL | 120 |
| xFAST-1 | FNGDYMGWKOSTIRHNLSSDCFKKILKDFGKPAKGFHAWDVSRTPIDAM | 204 |
| hFAST-1 | RLDNTALCRrwngGARGAFADLGPPYVILHGRHYrppspppppsegfslks | 171 |
| xFAST-1 | KLNTALTR-----GGSDYFVQGLAPYILHNYKfhnagayghqmpshar | 250 |
| hFAST-1 | llggsggapwpglapqssvpagtgnsgeevtpplpsserplwplcpl | 222 |
| xFAST-1 | sls laedsqqntnggkIntsfmidsllhdqevdlldasrnlengrispav | 301 |
| hFAST-1 | pgptrvegetvqggaicstlspebrawplllqgtavpggrssgghrasl | 273 |
| xFAST-1 | amnmwssaplllythsktrnarsgllstinstyssssssistispygfk | 352 |
| hFAST-1 | wgq----- | 276 |
| xFAST-1 | eqeksgqrtqrvgphikrsreddcsttssdpdtnyspieppkmpllsl | 403 |
| hFAST-1 | -LPTSILPIYTPNVVMlappdtsccpqpstspaywgvapetrpgpgllc- | 325 |
| xFAST-1 | dlPTSITKSVAPNVVAPsvlffhfrfttyngpsymtppywgfpht | 454 |
| hFAST-1 | -----LIDALFQGVPPKSIYDMVSHPRDLAAPpgwllsw | 362 |
| xFAST-1 | nsggdsprgpqspLILNMLRAMPPIKSVFDMLTSHPGDLVHpsfIsqclg | 505 |
| hFAST-1 | csi----- | 365 |
| xFAST-1 | ssgspypsrqglm | 518 |

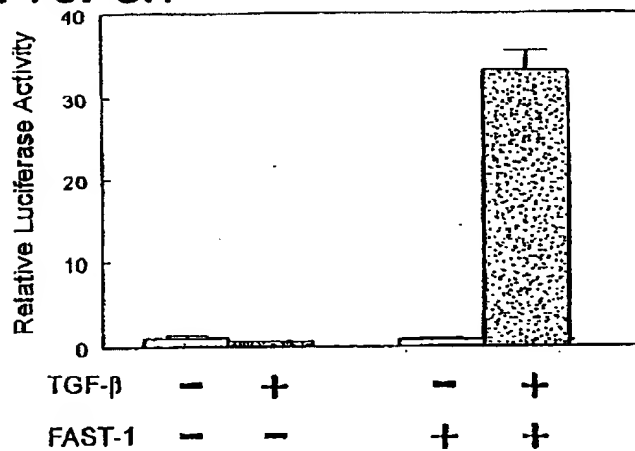
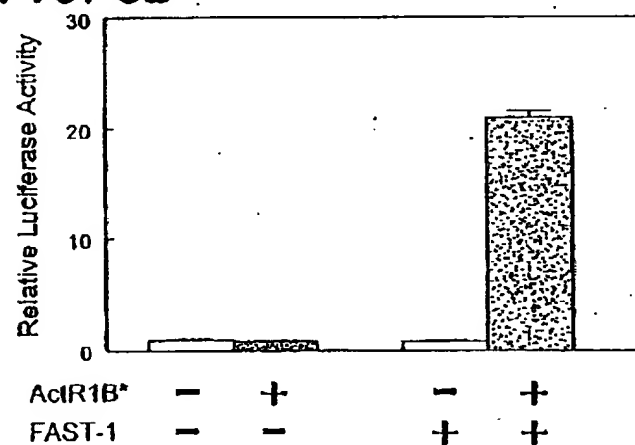
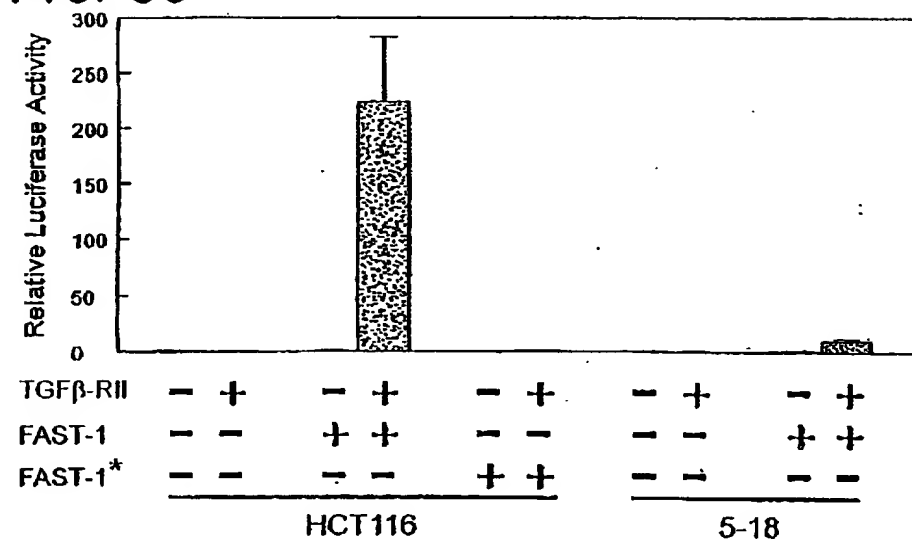
U.S. Serial No.: 09/776,696 Any. Dkt. No.: 001107.00087
Inventor: Shibin ZHOU
Title: HUMAN FAST-1 GENE

FIG. 2A**FIG. 2B**

U.S. Serial No.: 09/776,696 Atty. Dkt. No.: 001107.00087

Inventor: Shubin ZHOU

Title: HUMAN FAST-1 GENE

FIG. 3A**FIG. 3B****FIG. 3C**

☒ PATENT ☐ DESIGN B&W Ref. 001107:00087 Date 10-18-01
☐ HAND CARRY Group/Section
Serial/Patent No. 09/779696 Bldg SAK/mdd Rm
Inventor ZHOU Atty/Sec JHD
Title Human Fast-1 Gene Client JHD

The following has been received in the U.S. Patent and Trademark Office on the date stamped hereon:

☐ total pp Spec., including: # of Claims
(# of independent claims): ☐ Abstract
☒ Drawings: ☒ Formal ☐ Informal
of distinct sheets: 4 Figs. 1-4
☐ Declaration/Power of Attorney: ☐ Executed ☐ Unexecuted
☐ Assignment w/PTO Cover Sheet
☐ IDS w/PTO 1449 ☐ References ☐ w/Fee
☐ Preliminary Amendment
☐ Priority Claim (Foreign or U.S. Provisional. B&W #)

Country: Appl. # Date OCT 16 2001
☐ w/Foreign Priority Document(s)
Application: ☐ CIP ☐ Continuation ☐ Divisional
Parent Ser. No. B&W#
☐ U.S. Provisional pp Spec/Claims; Cover Sheet

☒ Response to Missing Parts/Requirements dtl
☐ Response to Notice to File Corrected Apph. Papers dtl
☐ Request for Expedited Foreign Filing License
☐ Request for Corrected: ☐ Filing Receipt ☐ Assignment
☐ Response to Restriction/Election Requirement

☐ Sequence Listing: ☐ Diskette ☐ Paper
☒ Amendment ☐ Response: OA dtl
☐ Petition for Extension of Time until
☐ CPA ☐ RCE ☐ w/Ext of Time: OA dtl
☐ Request for Approval of Drawing Changes
☐ Notice of Appeal & Fee
☐ Brief: ☐ Appeal & Fee ☐ Reply (11)
☐ Request for Oral Hearing
☐ Issue Fee ☐ Advance Patent Copies (# ordered)
☐ Notice of Allowance dtl
☐ Amendment under 37 CFR 1.312
☐ Request for Certificate of Correction
☐ Transmittal 52 Fee Transmittal w/Auth. to Charge Deposit Acct.
☐ Certificate of Mailing
☐ Check # for \$
☐
☐
☐

U.S. PATENT & TRADEMARK OFFICE

B&W Rev. 501

1001 G. STREET N.W, ELEVENTH FLOOR
WASHINGTON, D.C. 20001



BANNER & WITCOFF, LTD.
INTELLECTUAL PROPERTY LAW

TEL: 202.824.3000
FAX: 202.824.3001

www.bannerwitcoff.com

To: **John J. Gillon, Jr.**
Company: **USPTO**
Fax: **1 571 273 8300**
Phone: **1 571 272 3282**

RECEIVED
CENTRAL FAX CENTER
JUL 26 2006

From: **Sarah A. Kagan**
Fax: **1 202 824 3751**
Phone: **1 202 824 3151**

Re:

COPY OR REQUEST TO WITHDRAW WRONGFUL HOLDING OF ABANDONMENT, WITH ATTACHMENTS,
ORIGINALLY FILED 8/19/2003

Date Of Transmission: 7/26/2006 1:11:30 PM
Number Of Pages Including This Cover Sheet: 23

Important/Confidential: This message is intended only for the use of the individual or entity to whom it is addressed. This message contains information from the law firm of Banner & Witcoff, Ltd. which may be privileged, confidential or exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, retention, archiving, or copying of the communication is strictly prohibited. If you have received this communication in error, please notify us immediately at our telephone number listed above. We will be happy to arrange for the return of this message to our offices at no cost to you.

**RECEIVED
CENTRAL FAX CENTER****JUL 26 2006****PATENT****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Shibin ZHOU *et al.*

Serial No.: 09/776,696

Filed: February 6, 2001

For: HUMAN FAST-1 GENE

Atty. Docket No.: 001107.00087

Group Art Unit: 1636

Examiner: TBA

Confirmation No.: 5642

REQUEST TO WITHDRAW HOLDING OF ABANDONMENT***VIA FACSIMILE***

703-308-7751 (OIPE)

703-308-6916 (Nancy Johnson, Petitions Attorney)

Commissioner of Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In response to the Notice of Abandonment mailed July 7, 2003, Applicants respectfully request that the Commissioner withdraw the holding of abandonment because the application should not have been held abandoned. The Notice of Abandonment indicates that the basic filing fee and surcharge were not paid. Applicants, however, submitted authorizations for payment of these fees with their timely reply to the Notice to File Missing Parts. The fees were authorized in two places: (1) on page 1 of the Response; and (2) in the fee transmittal. A copy of the Response to Notice of Missing Parts including fee transmittal authorizing payment of filing fees, sequence listing, amendment with respect to sequence listing, figures, and date stamped receipt postcard is attached.

1 of 2

Request to Withdraw Holding of Abandonment
U.S. Patent Application No. 09/776,696

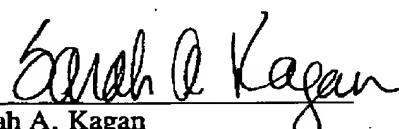
PATENT

It is believed that no fee is required with this paper, however, the Office may consider this a Petition to Revive and may charge any required fee to Deposit Account 19-0733. If there are any questions, please feel free to contact the undersigned at 202-824-3000.

Respectfully submitted,

Dated: August 19, 2003

By:


Sarah A. Kagan
Registration No. 32,141

Banner & Witcoff, Ltd.
Customer No. 22907

RECEIVED
CENTRAL FAX CENTER

Page 1 of 2

JUL 26 2006



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 09/776,696 | 02/06/2001 | Shibin Zhou | 01107.00087 |

CONFIRMATION NO. 5642

ABANDONMENT/TERMINATION
LETTER
*OC000000010437283*22907
BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

Date Mailed: 07/07/2003

NOTICE OF ABANDONMENT UNDER 37 CFR 1.53 (f) OR (g)

The above-identified application is abandoned for failure to timely or properly reply to the Notice to File Missing Parts (Notice) mailed on 09/05/2001.

- The reply received on 10/16/2001 was improper. The reply did not include:
 - The surcharge under 37 CFR 1.16(l) required for filing the basic filing fee or cover sheet on a date later than the filing date of a provisional application.
 - The full amount of the basic filing fee under 37 CFR 1.16(a), (f), (g), or (k). *Note: A nonprovisional application may not be relied on for benefits under 35 U.S.C. 120 and 37 CFR 1.78 unless the processing and retention fee set forth in 37 CFR 1.21(l) is paid within the one year period set forth in 37 CFR 1.53(f). A provisional application may not be relied on for benefits under 35 U.S.C. 119(e) and 37 CFR 1.78 unless the basic filing fee is paid.*

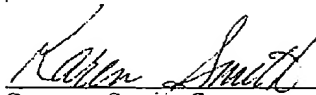
A petition to the Commissioner under 37 CFR 1.137 may be filed requesting that the application be revived.

Under 37 CFR 1.137(a), a petition requesting the application be revived on the grounds of **UNAVOIDABLE DELAY** must be filed promptly after the applicant becomes aware of the abandonment and such petition must be accompanied by: (1) an adequate showing of the cause of unavoidable delay; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(l); and (4) a terminal disclaimer if required by 37 CFR 1.137(d).

Under 37 CFR 1.137(b), a petition requesting the application be revived on the grounds of **UNINTENTIONAL DELAY** must be filed promptly after applicant becomes aware of the abandonment and such petition must be accompanied by: (1) a statement that the entire delay was unintentional; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(m); and (4) a terminal disclaimer if required by 37 CFR 1.137(d).

Any questions concerning petitions to revive should be directed to "Office of Petitions" at (703) 305-9282.

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 3 - OFFICE COPY

RECEIVED
CENTRAL FAX CENTER
JUL 26 2006

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|-------------------------|---|------------------------|
| In re Application Of: |) | Group Art Unit: 1636 |
| |) | |
| Shibin ZHOU |) | BOX: MISSING PARTS |
| |) | |
| Serial No.: 09/776,696 |) | |
| |) | Docket No. 01107.00087 |
| Filed: February 6, 2001 |) | |
| |) | |
| For: HUMAN FAST-1 GENE |) | |

**RESPONSE TO NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL
APPLICATION UNDER 37 C.F.R. § 1.53(b)**

Assistant Commissioner of Patents
Washington, D.C. 20231
Attn: Box Missing Parts

Dear Sir:

In response to the Notice to File Missing Parts Of Non-provisional Application, dated September 5, 2001, the Applicant is hereby submitting a Request to Use Computer Readable Form and corrected drawings.

The Commissioner is authorized to charge \$750.00 to Deposit Account No. 19-0733, to cover the following:

\$370.00 - Basic Filing Fee;
\$ 63.00 - 7 total claims over 20;
\$252.00 - 6 independent claims over 3;
\$ 65.00 - Surcharge for late declaration.

U.S. Application No. 09/776,696

Attorney Docket No. 001107.00087

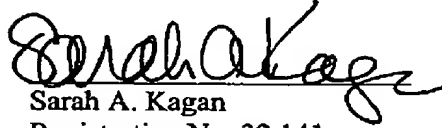
Page 2

It is believed that these fees as calculated are correct. However, if an additional fee is required, please charge Deposit Account No. 19-0733.

Respectfully submitted,

October 16, 2001

By:


Sarah A. Kagan
Registration No. 32,141

Banner & Witcoff, LTD.
Eleventh Floor
1001 G Street, N.W.
Washington, D.C. 2001
(202) 508-9100

423624-1

RECEIVED
CENTRAL FAX CENTER

JUL 26 2006

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | |
|-------------------------|---|---------------------------------|
| In re Application of: |) | |
| |) | |
| Shibin ZHOU |) | Group Art Unit: 1636 |
| |) | |
| Serial No. 09/776,696 |) | Examiner: TBA |
| |) | |
| Filed: February 6, 2001 |) | Attorney Docket No. 01107.00087 |
| |) | |
| For: HUMAN FAST-1 GENE |) | |

AMENDMENT AND RESPONSE TO NOTICE TO
COMPLY WITH SEQUENCE LISTING RULES

Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

When filing the subject application on 6 February 2001, Applicants submitted a substitute sequence listing in paper form and asked that the computer readable form of the parent application be used for examination. A copy of these papers are attached.

IN THE SPECIFICATION:

Delete pages 29-41 and add the new sequence listing to the end of the application. Renumber pages 42-48 as pages 29-35.


STATEMENT:

The new sequence listing adds no new matter.

Respectfully submitted,

Date: October 16, 2001

By:


Sarah A. Kagan
Registration No. 32,141

BANNER & WITCOFF, LTD.
1001 G Street, N.W., Eleventh Floor
Washington, D.C. 20001-4597
(202) 508-9100

423541-1

RECEIVED
CENTRAL FAX CENTER

JUL 26 2006

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Shibin Zhou *et al.*

Serial No. Unsigned

Filed: February 7, 2001

For: HUMAN FAST-1 GENE


)
) Prior Group Art Unit: 1636
)
) Prior Examiner: T. McKelvey
)
)
) Atty. Dkt. No. 01107.00087SEQUENCE RULES COMPLIANCEAssistant Commissioner of Patents & Trademarks
Washington, D.C. 20231

Dear Sir:

A paper copy of a substitute sequence listing submitted in parent application U.S. Serial No. 09/113,, 309 is submitted herewith. Please use the computer readable form submitted in the parent application on 18 November 1999 for examination of the subject application.

The content of the two forms, paper and CRF, are believed to be identical.

Respectfully submitted,

02-06-01
Date
Sarah A. Kagan
Reg. No. 32,141BANNER & WITCOFF, LTD.
1001 G Street, N.W. - Eleventh Floor
Washington, D.C. 20001-4597
Telephone: 202/508-9100**COPY**

SEQUENCE LISTING

<110> Zhou, Shibin
Zawel, Leigh
Vogelstein, Bert
Kinzler, Kenneth

<120> Human Fast-1 Gene

<130> 01107.10898

<140> 09/113,309

<141> 1998-07-10

<160> 19

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 1793

<212> DNA

<213> Homo sapiens

<400> 1

| | | | | | | | | | | |
|-------------|----|-------------|-------------|------------|----------|-------------|-------------|-----------|-----|-----|
| gttgagtc | aa | tgtgtcccc | tcttgttcc | aggggtgc | ggg | cttcattg | gcc | ttctcctcc | 60 | |
| ggaagctc | ca | cctgatcat | tcttgggtg | atatccag | cc | cccatagt | tc | agggcctac | 120 | |
| agcagctg | ct | agatcttga | ctccaggag | gccccacg | cc | ttgggagc | tt | ggcatgggt | 180 | |
| aaatactc | cc | ccatttgta | aatgggggt | tc | tgaaacct | ga | ccagggaag | cgggataaa | 240 | |
| tagccatg | gg | tcacgcgag | ccctttga | ag | ccgggcct | gg | ccacccaa | ag | gc | 300 |
| ggtggagac | t | gaggcctcag | gagaagcccc | cactagaat | g | ctctctgccc | ctcccttcca | 360 | | |
| gattaacca | aa | aacctgctaa | ttgtggaag | cctcggcat | g | ctccccctccc | ccacagcctc | 420 | | |
| ttcctccctt | | ccctcccttc | ccccttccat | ccgaatgata | | aaggccccag | cccgccctgcc | 480 | | |
| ccagccccgc | | ctcagggtccc | ggccctgctt | tctacactgc | | cccaccgccc | tgcacctctc | 540 | | |
| accogggccag | | gccccctgccc | acgtgtctta | ccgtcccgca | | tggggccctg | cagcggtccc | 600 | | |
| cgcctggggc | | ccccagaggc | agagtcgccc | tcccagcccc | | ctaagaggag | gaagaagagg | 660 | | |
| tacctgcgac | | atgacaagcc | cccctacacc | tacttgccca | | tgatcgctt | ggtgattcag | 720 | | |
| gccgtccctt | | cccgcagact | gaagctggcc | cagatcatcc | | gtcagggtcca | ggccgtgttc | 780 | | |
| cccttcttca | | gggaagacta | cgagggtctg | aaagactcca | | ttcgccacaa | cctttcctcc | 840 | | |
| aaccgatgct | | tccgcaaggt | gcccgaaggac | cctgcaaaag | | cccaggccaa | gggcaacttc | 900 | | |
| tgggcgggtcg | | acgtgagcct | gatcccagct | gaggcgctcc | | ggctgcagaa | caccgcctg | 960 | | |
| tgcgggcgct | | ggcagaacgg | aggtgcgct | ggagccttcg | | ccaaggacct | gggcccctac | 1020 | | |
| gtgctgcacg | | gccggccata | ccggccgccc | agtccccgc | | caccacccag | tgagggtctc | 1080 | | |
| agcatcaagt | | ccctgctagg | aggggtccggg | gagggggcac | | cctggccggg | gctagctcca | 1140 | | |
| cagagcagcc | | cagttcctgc | aggcacaggg | aacagtgggg | | aggaggcggt | gcccacccca | 1200 | | |
| ccccttccct | | cttctgagag | gcctctgtgg | cccctctgcc | | cccttccctg | ccccacgaga | 1260 | | |
| gtggaggggg | | agactgtgca | ggggggagcc | atcgggccc | | caaccctctc | cccagagcct | 1320 | | |
| agggcctggc | | ctctccactt | actgcagggc | accgcagttc | | ctgggggacg | gtccagcggg | 1380 | | |
| ggacacaggg | | cctccctctg | ggggcagctg | cccacctcct | | acttgccctat | ctacactccc | 1440 | | |
| aatgtggtaa | | tgcccttggc | accaccaccc | acctcctgtc | | cccagtgtcc | gtcaaccagc | 1500 | | |
| cctgcctact | | gggggggtggc | ccctgaaacc | cgaggggccc | | cagggtgct | ctgcgatcta | 1560 | | |
| gacgcctctt | | tccaaggggt | gccacccaac | aaaagcatct | | acgacgtttg | ggtcagccac | 1620 | | |
| cctcggggacc | | tggcggcccc | tggcccaggc | tggctgtctt | | cctggtgcag | cctgtgaggg | 1680 | | |
| tcttaagaca | | ggggccgctc | ctccctcccc | ctcccccccc | | cacctgtgtg | acagggagca | 1740 | | |
| agggaggcgg | | ctgtctgcga | cacagcagct | cgaaaaccag | | gcagagcttg | ttg | 1793 | | |

<210> 2

<211> 365

<212> PRT

<213> Homo sapiens

<400> 2

Met Gly Pro Cys Ser Gly Ser Arg Leu Gly Pro Pro Glu Ala Glu Ser
1 5 10 15
Pro Ser Gln Pro Pro Lys Arg Arg Lys Lys Arg Tyr Leu Arg His Asp
20 25 30
Lys Pro Pro Tyr Thr Tyr Leu Ala Met Ile Ala Leu Val Ile Gln Ala
35 40 45
Ala Pro Ser Arg Arg Leu Lys Leu Ala Gln Ile Ile Arg Gln Val Gln
50 55 60
Ala Val Phe Pro Phe Phe Arg Glu Asp Tyr Glu Gly Trp Lys Asp Ser
65 70 75 80
Ile Arg His Asn Leu Ser Ser Asn Arg Cys Phe Arg Lys Val Pro Lys
85 90 95
Asp Pro Ala Lys Pro Gln Ala Lys Gly Asn Phe Trp Ala Val Asp Val
100 105 110
Ser Leu Ile Pro Ala Glu Ala Leu Arg Leu Gln Asn Thr Ala Leu Cys
115 120 125
Arg Arg Trp Gln Asn Gly Gly Ala Arg Gly Ala Phe Ala Lys Asp Leu
130 135 140
Gly Pro Tyr Val Leu His Gly Arg Pro Tyr Arg Pro Pro Ser Pro Pro
145 150 155 160
Pro Pro Pro Ser Glu Gly Phe Ser Ile Lys Ser Leu Leu Gly Gly Ser
165 170 175
Gly Glu Gly Ala Pro Trp Pro Gly Leu Ala Pro Gln Ser Ser Pro Val
180 185 190
Pro Ala Gly Thr Gly Asn Ser Gly Glu Glu Ala Val Pro Thr Pro Pro
195 200 205
Leu Pro Ser Ser Glu Arg Pro Leu Trp Pro Leu Cys Pro Leu Pro Gly
210 215 220
Pro Thr Arg Val Glu Gly Glu Thr Val Gln Gly Gly Ala Ile Gly Pro
225 230 235 240
Ser Thr Leu Ser Pro Glu Pro Arg Ala Trp Pro Leu His Leu Leu Gln
245 250 255
Gly Thr Ala Val Pro Gly Gly Arg Ser Ser Gly Gly His Arg Ala Ser
260 265 270
Leu Trp Gly Gln Leu Pro Thr Ser Tyr Leu Pro Ile Tyr Thr Pro Asn
275 280 285
Val Val Met Pro Leu Ala Pro Pro Pro Thr Ser Cys Pro Gln Cys Pro
290 295 300
Ser Thr Ser Pro Ala Tyr Trp Gly Val Ala Pro Glu Thr Arg Gly Pro
305 310 315 320
Pro Gly Leu Leu Cys Asp Leu Asp Ala Leu Phe Gln Gly Val Pro Pro
325 330 335
Asn Lys Ser Ile Tyr Asp Val Trp Val Ser His Pro Arg Asp Leu Ala
340 345 350
Ala Pro Gly Pro Gly Trp Leu Leu Ser Trp Cys Ser Leu
355 360 365

<210> 3

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3

Val Ala Met Ile Asn Ala Cys Ile Asp Ser Met Ser Ser Ile Leu Pro
1 5 10 15

Phe Thr Pro Pro Val Val Lys Arg Leu Leu Gly Trp Lys Lys Ser Ala
 20 25 30
 Gly Gly Ser Gly Gly Ala Gly Gly Gly Glu Gln Asn Gly Gln Glu Glu
 35 40 45
 Lys Trp Cys Glu Lys Ala Val Lys Ser Leu Val Lys Lys Leu Lys Lys
 50 55 60
 Thr Gly Arg Leu Asp Glu Leu Glu Lys Ala Ile Thr Thr Gln Asn Cys
 65 70 75 80
 Asn Thr Lys Cys Val Thr Ile Pro Ser Thr Cys Ser Glu Ile Trp Gly
 85 90 95
 Leu Ser Thr Pro Asn Thr Ile Asp Gln Trp Asp Thr Thr Gly Leu Tyr
 100 105 110
 Ser Phe Ser Glu Gln Thr Arg Ser Leu Asp Gly Arg Leu Gln Val Ser
 115 120 125
 His Arg Lys Gly Leu Pro His Val Ile Tyr Cys Arg Leu Trp Arg Trp
 130 135 140
 Pro Asp Leu His Ser His His Glu Leu Lys Ala Ile Glu Asn Cys Glu
 145 150 155 160
 Tyr Ala Phe Asn Leu Lys Lys Asp Glu Val Cys Val Asn Pro Tyr His
 165 170 175
 Tyr Gln Arg Val Glu Thr Pro Val Leu Pro Pro Val Leu Val Pro Arg
 180 185 190
 His Thr Glu Ile Leu Thr Glu Leu Pro Pro Leu Asp Asp Tyr Thr His
 195 200 205
 Ser Ile Pro Glu Asn Thr Asn Phe Pro Ala Gly Ile Glu Pro Gln Ser
 210 215 220
 Asn Tyr Ile Pro Glu Thr Pro Pro Pro Gly Tyr Ile Ser Glu Asp Gly
 225 230 235 240
 Glu Thr Ser Asp Gln Gln Leu Asn Gln Ser Met Asp Thr Gly Ser Pro
 245 250 255
 Ala Glu Leu Ser Pro Thr Thr Leu Ser Pro Val Asn His Ser Leu Asp
 260 265 270
 Leu Gln Pro Val Thr Tyr Ser Glu Pro Ala Phe Trp Cys Ser Ile Ala
 275 280 285
 Tyr Tyr Glu Leu Asn Gln Arg Val Gly Glu Thr Phe His Ala Ser Gln
 290 295 300
 Pro Ser Leu Thr Val Asp Gly Phe Thr Asp Pro Ser Asn Ser Glu Arg
 305 310 315 320
 Phe Cys Leu Gly Leu Leu Ser Asn Val Asn Arg Asn Ala Thr Val Glu
 325 330 335
 Met Thr Arg Arg His Ile Gly Arg Gly Val Arg Leu Tyr Tyr Ile Gly
 340 345 350
 Gly Glu Val Phe Ala Glu Cys Leu Ser Asp Ser Ala Ile Phe Val Gln
 355 360 365
 Ser Pro Asn Cys Asn Gln Arg Tyr Gly Trp His Pro Ala Thr Val Cys
 370 375 380
 Lys Ile Pro Pro Gly Cys Asn Leu Lys Ile Phe Asn Asn Gln Glu Phe
 385 390 395 400
 Ala Ala Leu Leu Ala Gln Ser Val Asn Gln Gly Phe Glu Ala Val Tyr
 405 410 415
 Gln Leu Thr Arg Met Cys Thr Ile Arg Met Ser Phe Val Lys Gly Trp
 420 425 430
 Gly Ala Glu Tyr Arg Arg Gln Thr Val Thr Ser Thr Pro Cys Trp Ile
 435 440 445
 Glu Leu His Leu Asn Gly Pro Leu Gln Trp Leu Asp Lys Val Leu Thr
 450 455 460
 Gln Met Gly Ser Pro Ser Val Arg Cys Ser Ser Met Ser
 465 470 475

<210> 4
<211> 8
<212> DNA
<213> Homo sapiens

<400> 4
tgtkkatt 8

<210> 5
<211> 18
<212> DNA
<213> Homo sapiens

<400> 5
ctggaaagac tccattcg 18

<210> 6
<211> 19
<212> DNA
<213> Homo sapiens

<400> 6
cacagaggcc tctcagaag 19

<210> 7
<211> 18
<212> DNA
<213> Homo sapiens

<400> 7
cccccttcca tccgaatg 18

<210> 8
<211> 19
<212> DNA
<213> Homo sapiens

<400> 8
gagctgctgt gtcgcagac 19

<210> 9
<211> 79
<212> DNA
<213> Artificial Sequence

<220>
<223> flag primer

<400> 9
ggatcctaatac gactcact ataggagac caccatggac tacaaggacg acgatgacaa 60
ggggccctgc agcgctcc 79

<210> 10
<211> 81
<212> DNA
<213> Artificial Sequence

<220>
<223> flag primer

<400> 10
ggatcctaatacgaactcactatagggagac caccatggac tacaaggacg acgatgacaa 60
gcccccttcctggccccacga g 81

<210> 11
<211> 31
<212> DNA
<213> Homo sapiens

<400> 11
tatgcggcgcg ccaccatggg gccctgcagc g 31

<210> 12
<211> 30
<212> DNA
<213> Homo sapiens

<400> 12
tatgcggcgcg cgagctgctg tgctgcagac 30

<210> 13
<211> 7
<212> DNA
<213> Homo sapiens

<400> 13
rymaaya 7

<210> 14
<211> 22
<212> DNA
<213> Homo sapiens

<400> 14
tagtaaacac tctatcaatt gg 22

<210> 15
<211> 20
<212> DNA
<213> Homo sapiens

<400> 15
gtccagtatc gtttacagcc 20

<210> 16
<211> 21
<212> DNA
<213> Homo sapiens

<400> 16
cggattgtgt attggctgta c 21

<210> 17
<211> 21
<212> DNA
<213> Homo sapiens

<400> 17
cggattctgt atcggctgta c 21

<210> 18
 <211> 55
 <212> DNA
 <213> Homo sapiens

<400> 18
 tatctgctgc cctaaaatgt gtattccatg gaaatgtctg ccttctctc cgtac

55

<210> 19
 <211> 518
 <212> PRT
 <213> Xenopus laevis

<400> 19
 Met Arg Asp Pro Ser Ser Leu Tyr Ser Gly Phe Pro Ala Gly Ser Gln
 1 5 10 15
 Tyr Glu Ser Val Glu Pro Pro Ser Leu Ala Leu Leu Ser Ser Ile Asp
 20 25 30
 Gln Glu Gln Leu Pro Val Ala Thr Gly Gln Ser Tyr Asn His Ser Val
 35 40 45
 Gln Pro Trp Pro Gln Pro Trp Pro Pro Leu Ser Leu Tyr Arg Glu Gly
 50 55 60
 Gly Thr Trp Ser Pro Asp Arg Gly Ser Met Tyr Gly Leu Ser Pro Gly
 65 70 75 80
 Thr His Glu Gly Ser Cys Thr His Thr His Glu Gly Pro Lys Asp Ser
 85 90 95
 Met Ala Gly Asp His Thr Arg Ser Arg Lys Ser Lys Lys Lys Asn Tyr
 100 105 110
 His Arg Tyr Tyr Lys Pro Pro Tyr Ser Tyr Leu Ala Met Ile Ala Leu
 115 120 125
 Val Ile Gln Asn Ser Pro Glu Lys Arg Leu Lys Leu Ser Gln Ile Leu
 130 135 140
 Lys Glu Val Ser Thr Leu Phe Pro Phe Phe Asn Gly Asp Tyr Met Gly
 145 150 155 160
 Trp Lys Asp Ser Ile Arg His Asn Leu Ser Ser Ser Asp Cys Phe Lys
 165 170 175
 Lys Ile Leu Lys Asp Pro Gly Lys Pro Gln Ala Lys Gly Asn Phe Trp
 180 185 190
 Thr Val Asp Val Ser Arg Ile Pro Leu Asp Ala Met Lys Leu Gln Asn
 195 200 205
 Thr Ala Leu Thr Arg Gly Gly Ser Asp Tyr Phe Val Gln Asp Leu Ala
 210 215 220
 Pro Tyr Ile Leu His Asn Tyr Lys Tyr Glu His Asn Ala Gly Ala Tyr
 225 230 235 240
 Gly His Gln Met Pro Pro Ser His Ala Arg Ser Leu Ser Leu Ala Glu
 245 250 255
 Asp Ser Gln Gln Thr Asn Thr Gly Gly Lys Leu Asn Thr Ser Phe Met
 260 265 270
 Ile Asp Ser Leu Leu His Asp Leu Gln Glu Val Asp Leu Pro Asp Ala
 275 280 285
 Ser Arg Asn Leu Glu Asn Gln Arg Ile Ser Pro Ala Val Ala Met Asn
 290 295 300
 Asn Met Trp Ser Ser Ala Pro Leu Leu Tyr Thr His Ser Lys Pro Thr
 305 310 315 320
 Arg Asn Ala Arg Ser Pro Gly Leu Ser Thr Ile His Ser Thr Tyr Ser
 325 330 335
 Ser Ser Ser Ser Ser Ile Ser Thr Ile Ser Pro Val Gly Phe Gln Lys
 340 345 350
 Glu Gln Glu Lys Ser Gly Arg Gln Thr Gln Arg Val Gly His Pro Ile

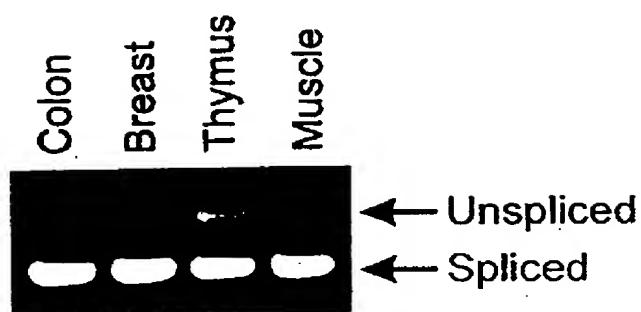
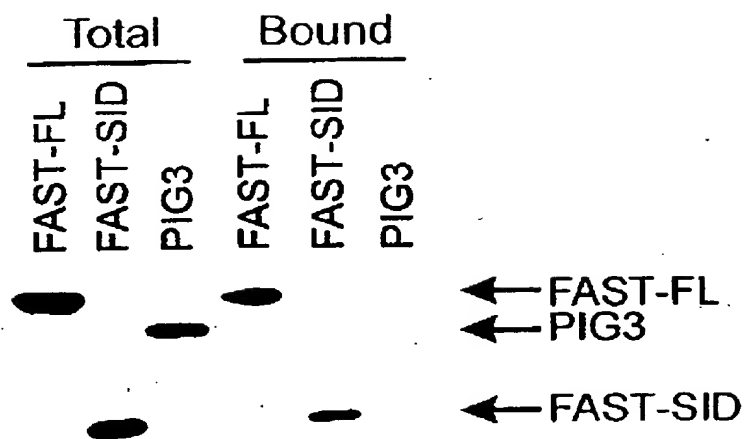
355 360 365
Lys Arg Ser Arg Glu Asp Asp Asp Cys Ser Thr Thr Ser Ser Asp Pro
370 375 380
Asp Thr Gly Asn Tyr Ser Pro Ile Glu Pro Pro Lys Lys Met Pro Leu
385 390 395 400
Leu Ser Leu Asp Leu Pro Thr Ser Tyr Thr Lys Ser Val Ala Pro Asn
405 410 415
Val Val Ala Pro Pro Ser Val Leu Pro Phe Phe His Phe Pro Arg Phe
420 425 430
Thr Tyr Tyr Asn Tyr Gly Pro Ser Pro Tyr Met Thr Pro Pro Tyr Trp
435 440 445
Gly Phe Pro His Pro Thr Asn Ser Gly Gly Asp Ser Pro Arg Gly Pro
450 455 460
Gln Ser Pro Leu Asp Leu Asp Asn Met Leu Arg Ala Met Pro Pro Asn
465 470 475 480
Lys Ser Val Phe Asp Val Leu Thr Ser His Pro Gly Asp Leu Val His
485 490 495
Pro Ser Phe Leu Ser Gln Cys Leu Gly Ser Ser Gly Ser Pro Tyr Pro
500 505 510
Ser Arg Gln Gly Leu Met
515

U.S. Serial No.: 09/776,696 Atty. Dkt. No.: 001107.00087
 Inventor: Shibin ZHOU
 Title: HUMAN FAST-1 GENE

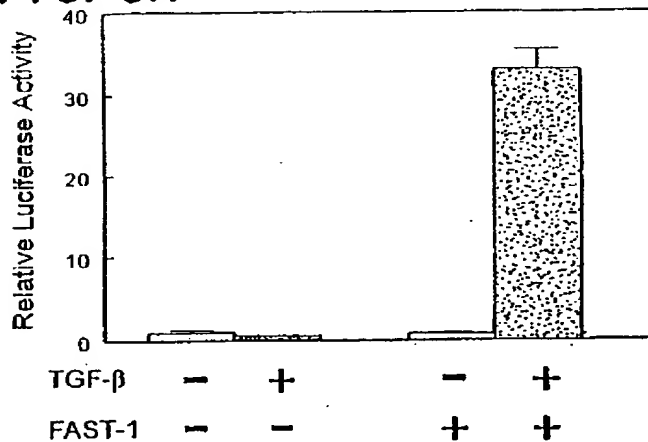
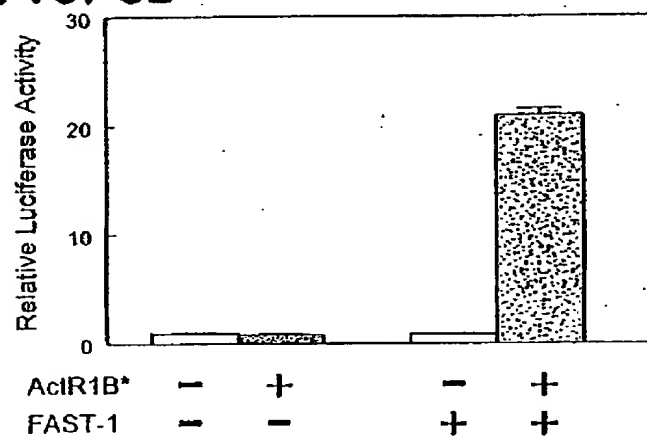
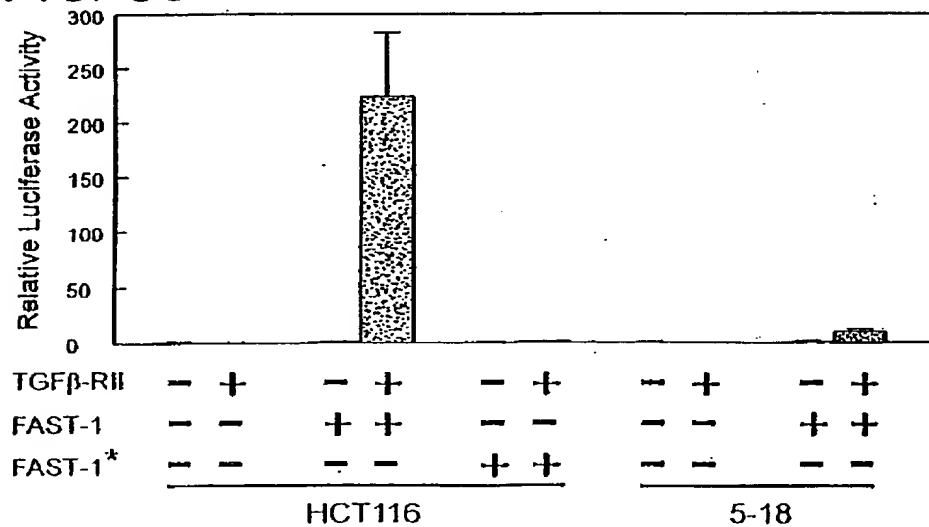
FIG. 1

| | | |
|---------|--|-----|
| hFAST-1 | hgpdsgrlga deaespqpp----- | 21 |
| xFAST-1 | hndpsslysqfagsgyesveppslallssidqeqlpvatgqsynhsvqpw | 51 |
| hFAST-1 | ----- | 21 |
| xFAST-1 | pqpwpplsl yreggtwspdrsgmyglspgthegscethhegpkdsmagdht | 102 |
| hFAST-1 | ---KRRKKRYLRHDKPPYIYLAMIALVIAAPSRRLKLAQIIIRQVDAVEPT | 69 |
| xFAST-1 | rstrKSKKKNYHRYKPPYSILAMIALVIONSPKRLKLSQILKEVSTLEPT | 153 |
| hFAST-1 | FREDYEGWKDSIRHNLSSNRCFRKVPKDPAPQAKGNFWANDVSLTPAEAL | 120 |
| xFAST-1 | FNGDYMGWKDSIRHNLSSSDCFKILKDPKPKQAKGNFWANDVSRITPLDAM | 204 |
| hFAST-1 | RLDNTALCRrwqngGARGAFAKDLGPYVLLGRPYrppspppppsegfslks | 171 |
| xFAST-1 | KL DNTALTR-----GGSDYFVQDLAPYIILHNYKvehnagayghqmpshar | 250 |
| hFAST-1 | llggsggapwpglapqssvpagtgnsgeeavtpplpsserplwplcpl | 222 |
| xFAST-1 | slslaedsqqtntggklntsfmidsllhdldqevldasrnlengrispav | 301 |
| hFAST-1 | pgptrvegetvqggagcstlspebrawplllqgtavpgrssggghrasl | 273 |
| xFAST-1 | amnmwssaplllythskotrnrspglstinstyssssssistispvgfqk | 352 |
| hFAST-1 | wgq----- | 276 |
| xFAST-1 | eqeksgrqtqrvgpikrsreddcsttssdpdtgnyspieppkmpllsl | 403 |
| hFAST-1 | -LITSM LPIYTPHVVHlappitscpqcpstspaywgvapetrpgpgllc- | 325 |
| xFAST-1 | qlITSMITKSVAPHVVHpsvllffhfrfitynygspymtppygwfphpt | 454 |
| hFAST-1 | -----DLDA LFQGVPPKSTYDMVSHPRDLAAPpggwllsw | 362 |
| xFAST-1 | nsggdsprgpqspilLHMLRAMPKSVFDMITSHPGDLVHsfllsqclg | 505 |
| hFAST-1 | csll----- | 365 |
| xFAST-1 | ssgspysrqglm | 518 |

U.S. Serial No.: 09/776,696 Arr. Dkt. No.: 001107.00087
Inventor: Shibin ZHOU
Title: HUMAN FAST-I GENE

FIG. 2A**FIG. 2B**

U.S. Serial No.: 09/776,696 Atty. Dkt. No.: 001107.00087
 Inventor: Shibin ZHOU
 Title: HUMAN FAST-1 GENE

FIG. 3A**FIG. 3B****FIG. 3C**

☒ PATENT ☐ DESIGN B&W Ref. 001107.00087 Date 10-14-01
☐ HAND CARRY Group/Section _____ Bldg _____ Rm _____
Serial/Patent No. 09/776,696 Atty/Sec SAR/mdd
Inventor ZHOU Client TIA
Title Human Feet-1 Creal

The following has been received in the U.S. Patent and Trademark Office on the date stamped hereon:

☐ total pp Spec., including: # of Claims _____
(# of independent claims _____): ☐ Abstract
☒ Drawings: ☒ Formal ☐ Informal 1-4
of distinct sheets 4: Figs. 1-4
☐ Declaration/Power of Attorney: ☐ Executed ☐ Unexecuted
☐ Assignment w/PTO Cover Sheet
☐ IDS w/PTO 1449 ☐ References ☐ w/Fee
☐ Preliminary Amendment
☐ Priority Claim (Foreign or U.S. Provisional, B&W # _____) OCT 16 2001

Country _____ Appl. # _____ Date _____
☐ w/Foreign Priority Document(s)
☐ Application: ☐ CIP ☐ Continuation ☐ Divisional
Parent Ser. No. _____ B&W# _____
☐ U.S. Provisional _____ pp Spec/Claims; Cover Sheet
☒ Response to Missing Parts/Requirements did _____
☐ Response to Notice to File Corrected Appn. Papers did _____
☐ Request for Expedited Foreign Filing License
☐ Request for Corrected: ☐ Filing Receipt ☐ Assignment
☐ Response to Restriction/Election Requirement

☐ Sequence Listing: ☐ Diskette ☐ Paper
☒ Amendment ☐ Response: OA did _____
☐ Petition for Extension of Time until _____
☐ CPA ☐ RCE ☐ w/Ext of Time: OA did _____
☐ Request for Approval of Drawing Changes
☐ Notice of Appeal & Fee
☐ Brief: ☐ Appeal & Fee ☐ Reply (11)
☐ Request for Oral Hearing
☐ Issue Fee ☐ Advance Patent Copies (# ordered _____)
☐ Notice of Allowance did _____
☐ Amendment under 37 CFR 1.312
☐ Request for Certificate of Correction
☐ Transmittal ☒ Fee Transmittal w/Auth. to Charge Deposit Acct.
☐ Certificate of Mailing
☐ Check # _____ for \$ _____
☐ _____
☐ _____
☐ _____

BAW Rev. 501

Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
it displays a valid OMB control number.

Under the Paperwork Reduction Act of 19

persons are required to respond to a collection of information

FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

Complete if Known

Application Number 09/776,696
Filing Date February 6, 2001
First Named Inventor Shubin ZHOU
Examiner Name TBA
Group / Art Unit 1636
Attorney Docket No. 001107.00087

RECEIVED
CENTRAL FAX CENTER
JUL 26 2006

TOTAL AMOUNT OF PAYMENT (\$ 750.00)

| METHOD OF PAYMENT (check one) | | | | | FEE CALCULATION (continued) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------|---------------------------|-----------------|--|---|-----------------------|---------------------------|--------------|-----------------|----------|-----------------------|-----------------------|-----------------|------------------------|-----------------|----------|-----|-----|-----------------------------------|-----|--------------------|--------|-----|---------------------------------------|-----|-----|-------------------|-----|--|-----|-------|-----|------------------|--|---------------------|------|-----|------|--------------------|---|--------|-----|--------|----|------------------------|-----|---------------------|----|--|-----|-----|--------------------|-----|--|-----|-----|-----|-----|--|-----|-------|-----|-----|--|-----|-------|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|-------|-----|-------|--|-----|-----|-----|----|--|-----|-------|-----|-----|--|-----|-------|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|----|-----|----|--|-----|-----|-----|-----|--|-----|----|-----|----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|-----|-----|-----|-----|--|
| 1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to: Deposit Account Number: 19-0733 Deposit Account Name: Banner & Witcoff <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27 | | | | | 3. ADDITIONAL FEES <table border="1"> <thead> <tr> <th>Fee Code</th> <th>Large Entity Fee (\$)</th> <th>Small Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>65</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td></td></tr> </tbody> </table> | | | | | Fee Code | Large Entity Fee (\$) | Small Entity Fee (\$) | Fee Description | Fee Paid | 105 | 130 | 205 | 65 | | 127 | 50 | 227 | 25 | | 139 | 130 | 139 | 130 | | 147 | 2,520 | 147 | 2,520 | | 112 | 920* | 112 | 920* | | 113 | 1,840* | 113 | 1,840* | | 115 | 110 | 215 | 55 | | 116 | 400 | 216 | 200 | | 117 | 920 | 217 | 460 | | 118 | 1,440 | 218 | 720 | | 128 | 1,960 | 228 | 980 | | 119 | 320 | 219 | 160 | | 120 | 320 | 220 | 160 | | 121 | 280 | 221 | 140 | | 138 | 1,510 | 138 | 1,510 | | 140 | 110 | 240 | 65 | | 141 | 1,280 | 241 | 640 | | 142 | 1,280 | 242 | 640 | | 143 | 460 | 243 | 230 | | 144 | 620 | 244 | 310 | | 122 | 130 | 122 | 130 | | 123 | 50 | 123 | 50 | | 126 | 180 | 126 | 180 | | 581 | 40 | 581 | 40 | | 146 | 740 | 246 | 370 | | 149 | 740 | 249 | 370 | | 179 | 740 | 279 | 370 | | 169 | 900 | 169 | 900 | |
| Fee Code | Large Entity Fee (\$) | Small Entity Fee (\$) | Fee Description | Fee Paid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 105 | 130 | 205 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 127 | 50 | 227 | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 139 | 130 | 139 | 130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 147 | 2,520 | 147 | 2,520 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 112 | 920* | 112 | 920* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 113 | 1,840* | 113 | 1,840* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 115 | 110 | 215 | 55 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 116 | 400 | 216 | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 117 | 920 | 217 | 460 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 118 | 1,440 | 218 | 720 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 128 | 1,960 | 228 | 980 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 119 | 320 | 219 | 160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 120 | 320 | 220 | 160 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 121 | 280 | 221 | 140 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 138 | 1,510 | 138 | 1,510 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 140 | 110 | 240 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 141 | 1,280 | 241 | 640 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 142 | 1,280 | 242 | 640 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 143 | 460 | 243 | 230 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 144 | 620 | 244 | 310 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 122 | 130 | 122 | 130 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 123 | 50 | 123 | 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 126 | 180 | 126 | 180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 581 | 40 | 581 | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 146 | 740 | 246 | 370 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 149 | 740 | 249 | 370 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 179 | 740 | 279 | 370 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 169 | 900 | 169 | 900 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. <input type="checkbox"/> Payment Enclosed: <input type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FEE CALCULATION <table border="1"> <thead> <tr> <th colspan="5">1. BASIC FILING FEE</th> <th></th> </tr> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>740</td><td>201</td><td>370</td><td>Utility filing fee</td><td>370.00</td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>510</td><td>207</td><td>255</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>740</td><td>208</td><td>370</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="5">SUBTOTAL (1)</td><td>(\$ 370.00)</td></tr> </tbody> </table> | | | | | 1. BASIC FILING FEE | | | | | | Large Entity Fee Code | Small Entity Fee Code | Fee (\$) | Fee (\$) | Fee Description | Fee Paid | 101 | 740 | 201 | 370 | Utility filing fee | 370.00 | 106 | 330 | 206 | 165 | Design filing fee | | 107 | 510 | 207 | 255 | Plant filing fee | | 108 | 740 | 208 | 370 | Reissue filing fee | | 114 | 160 | 214 | 80 | Provisional filing fee | | SUBTOTAL (1) | | | | | (\$ 370.00) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. BASIC FILING FEE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Large Entity Fee Code | Small Entity Fee Code | Fee (\$) | Fee (\$) | Fee Description | Fee Paid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 101 | 740 | 201 | 370 | Utility filing fee | 370.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 106 | 330 | 206 | 165 | Design filing fee | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 107 | 510 | 207 | 255 | Plant filing fee | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 108 | 740 | 208 | 370 | Reissue filing fee | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 114 | 160 | 214 | 80 | Provisional filing fee | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUBTOTAL (1) | | | | | (\$ 370.00) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. EXTRA CLAIM FEES <table border="1"> <thead> <tr> <th>Total Claims</th> <th>Independent Claims</th> <th>Multiple Dependent Claims</th> <th>Extra Claims</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>27</td><td>20</td><td>**</td><td>7</td><td>9</td><td>63</td></tr> <tr><td>9</td><td>3</td><td>**</td><td>6</td><td>42</td><td>252</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td>0</td></tr> </tbody> </table> | | | | | Total Claims | Independent Claims | Multiple Dependent Claims | Extra Claims | Fee from below | Fee Paid | 27 | 20 | ** | 7 | 9 | 63 | 9 | 3 | ** | 6 | 42 | 252 | | | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Claims | Independent Claims | Multiple Dependent Claims | Extra Claims | Fee from below | Fee Paid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | 20 | ** | 7 | 9 | 63 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 3 | ** | 6 | 42 | 252 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th>Fee (\$)</th> <th>Fee Description</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td></tr> <tr><td>102</td><td>84</td><td>202</td><td>42</td><td>Independent claims in excess of 3</td></tr> <tr><td>104</td><td>280</td><td>204</td><td>140</td><td>Multiple dependent claim, if not paid</td></tr> <tr><td>109</td><td>84</td><td>209</td><td>42</td><td>** Reissue independent claims over original patent</td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td></tr> <tr><td colspan="5">SUBTOTAL (2)</td></tr> </tbody> </table> | | | | | Large Entity Fee Code | Small Entity Fee Code | Fee (\$) | Fee (\$) | Fee Description | 103 | 18 | 203 | 9 | Claims in excess of 20 | 102 | 84 | 202 | 42 | Independent claims in excess of 3 | 104 | 280 | 204 | 140 | Multiple dependent claim, if not paid | 109 | 84 | 209 | 42 | ** Reissue independent claims over original patent | 110 | 18 | 210 | 9 | ** Reissue claims in excess of 20 and over original patent | SUBTOTAL (2) | | | | | SUBTOTAL (3) (\$ 65.00) *Reduced by Basic Filing Fee Paid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Large Entity Fee Code | Small Entity Fee Code | Fee (\$) | Fee (\$) | Fee Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 103 | 18 | 203 | 9 | Claims in excess of 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 102 | 84 | 202 | 42 | Independent claims in excess of 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 104 | 280 | 204 | 140 | Multiple dependent claim, if not paid | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 109 | 84 | 209 | 42 | ** Reissue independent claims over original patent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 110 | 18 | 210 | 9 | ** Reissue claims in excess of 20 and over original patent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUBTOTAL (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**or number previously paid, if greater. For Reissues, see above

| SUBMITTED BY | | Complete (if applicable) | |
|-------------------|----------------|---------------------------------|------------------|
| Name (Print/Type) | Sarah A. Kagan | Registration No. Attorney/Agent | 32,141 |
| Signature | | Telephone | 202-508-9100 |
| | | Date | October 16, 2001 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2036.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED
CENTRAL FAX CENTER

Page 1 of 2

JUL 26 2006



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|------------------------|
| 09/776,696 | 02/06/2001 | Shibin Zhou | 01107.00087 |

22907

BANNER & WITCOFF
1001 G STREET N W
SUITE 1100
WASHINGTON, DC 20001

02/27/2006 MBIZUNES-00000024-09776696

01-FC:2011 150.00-DA
02-FC:2111 250.00-DA
03-FC:2311 100.00-DA
04-FC:2051 65.00-DA
05-FC:2202 175.00-DA
06-FC:2201 600.00-DA

CONFIRMATION NO. 5642

FORMALITIES LETTER



OC000000006513112

Date Mailed: 09/05/2001

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

02/27/2006 MBIZUNES-00000024-09776696

01-FC:2011 150.00-DA
02-FC:2111 250.00-DA
03-FC:2311 100.00-DA
04-FC:2051 65.00-DA
05-FC:2202 175.00-DA
06-FC:2201 600.00-DA

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
Applicant must submit \$ 355 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).
- Total additional claim fee(s) for this application is \$303.
 - \$63 for 7 total claims over 20.
 - \$240 for 6 independent claims over 3.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$ 723.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);
- The paper or compact disc copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e). Applicant must provide a substitute paper or compact disc copy of the "Sequence Listing", as well as an amendment directing its entry into the

application OR a substitute computer readable form (CRF) copy of the "Sequence Listing". These two items must be the same. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE